ABSTRACT

The invention relates to a soft and flexible surgical soft tissue mesh comprising polyethylene yarns, wherein the polyethylene yarns have a tensile strength of more than 1.0 GPa and consist of a polyethylene with a relative viscosity of more than 5 dl/g.

A further aspect of the invention is a method of producing a soft and flexible surgical soft tissue mesh comprising polyethylene yarns, wherein yarns are applied that comprise filaments made by:

a) spinning at least one filament from a solution of polyethylene with a relative viscosity of more than 5 dl/g in a solvent;
b) cooling the filament obtained to form a gel filament
c) removing at least partly the solvent from the gel filament; and
d) drawing the filament in at least one drawing step before, during or after removing solvent.